

Fusion-1009

Twelve-in-one Integrated Processor



Intelligent controller



video switching matrix



Digital audio processing



Audio digital power amplifier



POE Switch



video Conference



Recording



Input/output interface



IPC input

PRODUCT OVERVIEW

The **Fusion-1008** is a next-generation 12-in-1 integrated processor, engineered for superior multimedia performance and seamless system integration. Building on the success of its predecessor, the Fusion-1009 consolidates twelve powerful functions into a single, compact unit—maximizing efficiency, minimizing wiring complexity, and reducing installation time.

Ideal for smart classrooms, advanced conference rooms, hybrid lecture halls, command centers, and multi-functional venues, the Fusion-1009 supports a broad range of applications—from local presentations and remote collaboration to live streaming and interactive training. With robust reliability, intuitive control, and high-resolution performance, the Fusion-1009 delivers unmatched flexibility for modern AV environments.

KEY FEATURES

- **Smart Centralized Control:** Control and manage all multimedia systems via a single conference tablet. Seamlessly operate audio, video, conferencing, recording, broadcasting, and third-party devices through one unified interface.
- **Standard Control Interfaces:** Supports RS232/485, IR, IO, and RELAY connections for common AV and automation devices.
- **Zigbee IoT Protocol:** Enables wireless control of smart devices through Zigbee integration.
- **Bi-directional Serial Communication:** Supports two-way control over a single serial link for seamless device interaction.
- **Hybrid Control Design:** Combines wired and wireless IoT control, preventing interference and disconnection even in shielded environments.
- **4K Video Matrix Switching:** 4-in 2-out seamless 4K@60Hz video switching for fast and clear AV transitions.
- **Digital Audio Interface:** Features 8-in/4-out configuration with network and HDMI audio routing.
- **Built-in Amplifier:** Delivers 2×100W output power for direct speaker drive.
- **Multi-Stream Local Recording:** Records 4–6 video streams simultaneously for meetings, training, or lectures.
- **IPC Camera Integration:** Supports up to 12 IPC video inputs for live output, display, or recording.

APPLICATIONS

- Meeting Room
- Courtrooms
- Hotels
- Conference Center
- Classrooms
- Lecture Halls
- House of Worship
- Training Rooms
- All Hand Space

TECHNICAL SPECIFICATIONS

System Specifications

Operating System	Industrial-grade architecture based on Linux, virus-free
Built-in Computer Module	Integrated OPS 11th Gen Windows PC with Windows 11 Pro, 16GB RAM, 512GB SSD
Central Control	One-touch control panel for system switch, source selection, volume, camera control, etc
Communication Protocols	SIP, H.323, BFCP, H.239, RTSP, RTMP, TCP/IP, HTTP, FTP, NTP, RTP, RTCP, TLS, Telnet, and more
Control Interfaces	3× RS-232/485, 1× RS232/RS485 Debug, 2× Relay, 2× I/O, 2× IR
Touch Panel Options	10.1" Wired (no PoE), PoE Desktop, and PoE Wall-Mounted (standard with box)
Zigbee IoT Support	For wireless smart device integration
Hybrid Control	Wired + Wireless control for robust connectivity
Network Ports	1× WAN 5× LAN (4 with PoE) Configurable full interconnection across all 6 ports

Technical Specifications

Audio Input	8× Phoenix inputs (48V phantom MIC or line-in) 4× HDMI embedded audio 1× OPS PC audio 1× Wireless screen projection (optional) 1× Wireless mic module (optional)
Audio Output	4× Line out (2 pairs of L/R Phoenix stereo) 2× HDMI embedded audio 2× Digital amplifier (2×100W @8Ω or 2×150W @4Ω)
Audio Processing	AEC, AGC, ANC/ANS, AFC, AM, PLC Audio sync, volume control, mixing, dynamic routing
Video Input	4× HDMI (HDMI IN1 & IN3: 4K30; IN2 & IN4: 1080p60) 16× IP network camera inputs
Video Output	6× HDMI (HDMI OUT1: 4K30; OUT2-OUT6: 1080p60) Picture-in-picture, picture-out-picture, 16-split screen support Subtitle overlay, terminal name, station logo (with transparency control)
Codec Capabilities	Up to 16 channels 1080P encoding/decoding 512Kbps-16Mbps per channel Supports H.264HP/MP/BP, H.265MP
Display Modes	1 to 16 split screens Output priority control based on active meetings or OPS content
Video Conference	Protocols: H.323 & SIP with short-number calling, GK & SIP registration Capacity: Up to 6-party SIP conferences, multiple templates, scheduling Control Features: Mute/unmute participants, invite/kick participants
Streaming	Supports >8 platforms simultaneously Up to 10-channel multicast and live/on-demand playback
Wireless Projection	PC/Mobile/PAD to HDMI OUT via wireless module USB ports for transmitter pairing and updates Ceiling-mounted antennas for better reception
Wireless Microphone	Optional clip-on/headset mics UHF receiver module supports dual mic speech

Mechanical Specifications

Installation	2U standard telecom rack mount; install near AV peripherals for reduced wiring
Dimensions	436.8 mm (W) × 89 mm (H) × 320 mm (D)
Power Input	AC 100-240V, 50/60Hz
Power Consumption	80W (no speakers/PoE devices)
Operating Conditions	Temperature: 0-45°C Humidity: 10%-90% Altitude: ≤ 5000 meters

Rear View

